

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

WSOU INVESTMENTS, LLC d/b/a)
BRAZOS LICENSING AND)
DEVELOPMENT,)
Plaintiff,) Case No. 6:20-cv-00473-ADA
v.)
DELL TECHNOLOGIES INC., DELL INC.,)
and EMC CORPORATION,)
Defendant.)
)
)
)
JURY TRIAL DEMANDED
)

**PLAINTIFF'S OPPOSITION TO DEFENDANTS' RULE 12(c)
MOTION FOR JUDGMENT ON THE BASIS OF INELIGIBILITY
UNDER 35 U.S.C. § 101 OF U.S. PATENT NO. 9,137,144**

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Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development (“Plaintiff” or “Brazos”) submits this brief in opposition to the Rule 12(c) motion for judgment on the pleadings (the “Motion”) filed by Defendants Dell Technologies Inc., Dell Inc., and EMC Corporation (collectively “Defendants” or “Dell”).¹

I. INTRODUCTION

Dell’s burden is a heavy one; it must show by clear and convincing evidence that Brazos’ patent claims are ineligible. Dell does not—because it cannot—do so. To the contrary, as shown below, the ’144 patent claims are clearly patentable under both governing Section 101 tests as set forth in *Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (“Alice”).

First, the ’144 patent claims are not abstract; they are directed to a new and inventive network device or mechanism that determines and selects the lowest cost communication traffic path(s) through a LAN or similar communication network. The ’144 patent inventions solved technological shortcomings in the prior art – specifically, the failure of prior art communications network protocols to make use of all available network resources to maximize efficiency in transmitting communications across the network. By contrast, the network nodes and computer program claimed in the ’144 patent make use of all possible paths within a network to improve network efficiency and performance. Just as in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed Cir. 2016), the claimed invention of the ’144 patent improves existing technology, the protocols for setting communication paths across a network, by making sure that the network does not skip over possible paths, decreasing network efficiency.

¹ Submitted herewith and relied upon in opposition to Dell’s Motion is the Declaration of Jonathan K. Waldrop, dated May 23, 2022 (“Waldrop Declaration” or “Waldrop Decl.”). “Ex.” refers to exhibits attached to the Waldrop Declaration. “Mot.” refers to Dell’s Rule 12(c) Motion for Judgment on the Basis of Ineligibility Under 35 U.S.C. § 101 of U.S. Patent No. 9,137,144 (D.I. No. 184). At present, Brazos asserts claims 1, 4, 11, 12 and 14 against Defendants.

Second, even assuming that the asserted claims fail under *Alice* Step 1 (and they do not), the claims nevertheless demonstrate an “inventive concept” under *Alice* Step 2. While Dell would have the Court hold that the claims’ recitation of certain “well-known” components means that there cannot be any inventive concept, the claims, read in light of the specification, make clear that the claimed invention provides “something more” than prior art network path assignment methods did. In particular, the claimed inventions involve determining the lowest cost paths from a plurality of contiguous communications paths, indexing the lowest cost paths, and selecting from those indexed paths when called upon to route network traffic. Even to the extent the claimed structures themselves are not new, they are arranged and used in an unconventional manner to achieve a technologically superior result.

Thus, this Court should deny Dell’s Motion.

II. FACTUAL BACKGROUND

A. The ’144 Patent Describes Technological Problems of Prior Art Methods for Selecting Paths Between Network Nodes

Communication networks, such as local area networks (“LANs”), include many devices that communicate with each other across the network. For example, as explained in the ’144 patent, personal computers can communicate with each other and with servers through networks. (Waldrop Decl., Ex. 1 at 1:28-37.) But the various devices in a given network are usually not all connected to all other devices on the network. Rather, devices may be connected to network “nodes,” *i.e.*, connection points (*e.g.*, network switches, bridges, etc.) in a communication network that can, among other things, send and receive data over communication channels in the network. Depending on the organization of these nodes, information between devices may be able to travel over a network’s various communication channels via more than one path. (*Id.*, 1:38-47.) By analogy, when driving a car from point A to point B, there may be multiple routes (paths) the

driver can take, each involving different sets of roads and intersections (channels and nodes) of varying lengths, quality, and traffic conditions that may make some routes faster or more efficient than others.

Various protocols for directing communications on a network have been developed. As explained in the specification of the '144 patent, one such prior art protocol, spanning tree protocol ("STP"), was developed to map out efficient paths through the network and prevent loops where data traffic traversing the network may be forwarded to the same node more than once during the attempt to transmit it from a source to a destination. (*Id.*, 1:48-53.) In preventing loops to find the most efficient paths, STP will often block the use of some links between network devices as redundant. If the communication is not able to reach its destination (e.g., a failure of a link or network occurs), the paths through the network are recalculated and the redundant links may be utilized, but otherwise they represent an inefficient use of network resources. (*Id.*, 1:53-58.)

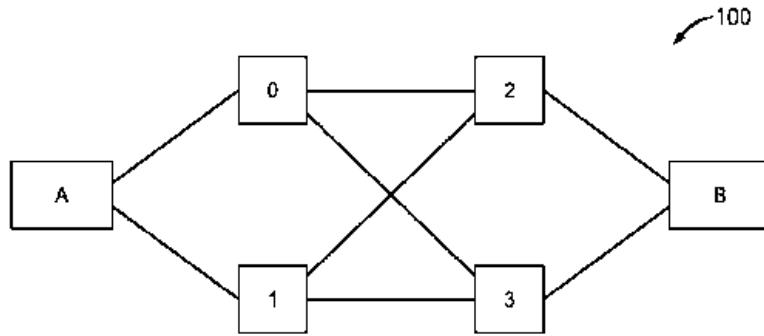
Another prior art protocol is called shortest path bridging ("SPB"), described by standard IEEE 802.1aq, uses a path mapping scheme that utilizes redundant paths by determining a number of equal-cost, equal-hop ("EHEC," *see infra* at 5) paths through the network from a given source bridge to a particular destination bridge, and assigning each virtual local area network ("VLAN") to one of one or more EHEC paths. (*Id.*, 1:59-65.) A VLAN creates a broadcast domain for Ethernet traffic through the network by identifying certain intermediate bridges for use by the VLAN traffic. A VLAN may be associated with, for example, a particular department or customer. Loops are avoided because the data traffic always takes the specified path. At the same time, other VLANs may be assigned to otherwise redundant paths through the network. But this protocol also sometimes fails to fully utilize all available paths when making these assignments. (*Id.*, 1:65-2:12.)

Thus, the specification makes clear that at the time the '144 patent was filed, there was a significant need to address the shortcomings in the STP and SPB protocols, as well as other shortcomings associated with selecting network communication paths for VLANs or other groups of data traffic. These needs and other needs are satisfied by the invention of the '144 patent. (*Id.*, 2:19-23.)

B. The '144 Patent Teaches Specific Technological Solutions to Problems Associated with Prior Art Network Path Selection Techniques

To address the above-described technological difficulties in the prior art network path selection protocols, the inventors of the '144 patent created a method for selecting communication paths across a network that increased the efficiency of the network by ensuring that all possible lowest cost paths are available to network traffic. As the specification explains, “the present invention is directed at a manner of selecting communication traffic paths through a LAN or similar communication network.” (*Id.*, 2:27-29.) It goes on to note the benefits of the invention of the prior art: “The present invention is particularly advantageous in large, highly meshed networks where existing SPB protocols such as IEEE 802.1aq do not always distribute traffic as efficiently as possible.” (*Id.*, 3:57-61.)

Figure 1 of the '144 patent provides an example of the network in which an embodiment of the claimed invention can be used. The nodes of network 100 are directly linked to one another as shown, for example using fiber optic cables. As an example, one port of node 0 is linked to node A, a second port to node 3, and a third port to node 2. Data traffic may pass from node A to node 2 via node 0 (or alternately, in this example, through node 1).

***FIG. 1***

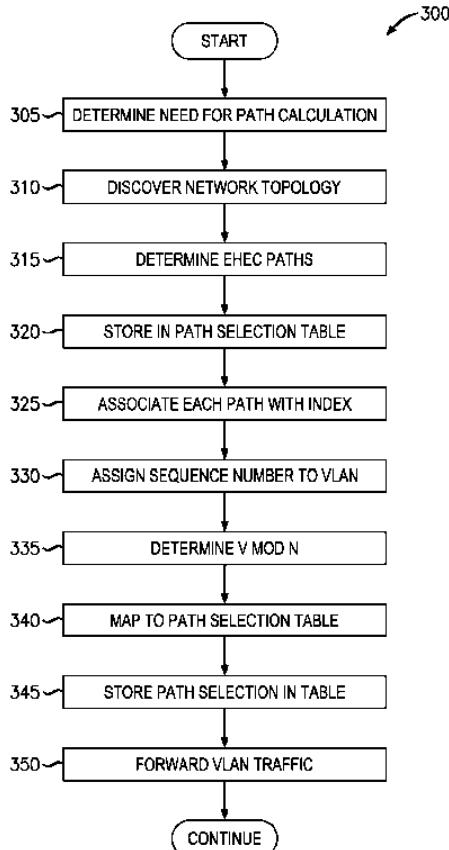
In the example of FIG. 1, nodes A and B may be considered source and destination bridges, respectively. That is, they may be routers or some form of edge devices, perhaps linked to client devices or servers or to other networks or sub networks (not shown). The traffic is received at source bridge A and must be communicated to destination bridge B by one path or another. (*Id.*, 4:4-10.) As shown FIG. 1, there are four paths from source bridge A to source bridge B available for data traffic that use the least number of hops (here, two hops). These paths may be labeled as 0:2, 0:3, 1:2, and 1:3, the labels deriving from the nodes that make up each path. These paths may be referred to as EHEC paths as each of the four includes two nodes between the source bridge and the destination bridge (the cost of each link is presumed to be equal, as is true in many networks in use today). Other paths are available, for example 0:3:1:2, but these are generally avoided when lower cost paths are available. (*Id.*, 4:14-24.)

As explained in the patent, SPB as set forth in IEEE 802.1aq provides for initial topology discovery of the network 100 and determining the available paths. In the example of FIG. 1, however, the ECT (equal cost tree) protocols provided in IEEE 802.1aq may select only two paths; 0:2 and 1:3, while ignoring the other two. When this occurs, no traffic groupings (for example, VLANs) will be assigned to the paths 0:3 and 1:2. In more highly-meshed networks, only sixteen

paths are calculated regardless of how many may be available. (*Id.*, 4:35-44.) Thus, the invention of the '144 patent provides an advantageous manner of addressing this problem with SPB and providing for a full selection of the available pathways between source bridge A and destination bridge B. (*Id.*, 4:44-49.)

The patent specification provides detailed descriptions of an embodiment of the claimed invention. One example is provided in connection with Figure 2. Figure 2 shows a network that has a total of nine possible paths between source bridge C and destination bridge D. These nine possible paths are stored in a path selection table. Once stored, a path can be assigned for each VLAN using the algorithm V modulus N (or “V mod N”). (*Id.*, 5:13-6:44.) Using this method ensures that paths that have an equal cost (having, for example, the same number of “hops” between source and destination) will be used as efficiently as possible. (*Id.*, 5:57-63.) Even if a given path is assigned to more than one VLAN, as shown in Table 4, this method will prevent a path through the network in Figure 2 from being used by three VLANs while another path is only used once or not at all. (6:20-44.)

One possible process for the method of claim 1 is shown from beginning to end in Figure 3. Once a network path is required, the source bridge maps the network and determines EHEC paths through the network. Those paths are stored in the path selection table and each given an index. Next, each VLAN that needs a path through the network is given a sequence number, which is used to perform the V mod N algorithm and assign paths to the VLANs. The VLAN path assignment itself is then stored in a table and the VLAN traffic is passed through the network to the destination. (*Id.*, 6:45-7:51.)

***FIG. 3***

The improvements and networking benefits from the invention are clear in the limitations of claim 1:

A method of selecting, for a group of communication traffic, a communication path from a source node to a destination node through a network comprising a plurality of contiguous communication paths, the method comprising:

determining lowest cost paths from the plurality of contiguous communication paths;

determining $V \bmod N$.

comparing a result of the determining to indices on a path Selection table that associates a unique index with each of the plurality of communication paths, and

selecting a path associated with an index equal to the result, wherein N is a number of the lowest cost paths in the

plurality of communication paths and V is a group identifier corresponding to the group of communication traffic.

For example, “determining lowest cost paths from the plurality of contiguous communication paths”² as part of this method avoids the problems in prior art path assignment protocols because it does not artificially limit the total number of paths available to network traffic.³ (See, e.g., *id.*, 4:44-49.)

III. LEGAL STANDARDS

Motion for Judgment on the Pleadings. Courts review a Federal Rule 12(c) motion for judgment on the pleadings under the same standards as a Federal Rule 12(b)(6) motion to dismiss for failure to state a claim. *Terry Black’s Barbecue, L.L.C. v. State Auto. Mut. Ins. Co.*, 22 F.4th 450, 454 (5th Cir. 2022). When deciding Rule 12(b)(6) motions, courts “accept all well-pleaded facts as true and draw all reasonable inferences in favor of the nonmoving party.” *Jim S. Adler, P.C. v. McNeil Consultants, L.L.C.*, 10 F.4th 422, 426 (5th Cir. 2021). To survive a motion to dismiss, the complaint must contain sufficient factual matter, accepted as true, to state a claim to relief that is plausible on its face. *Id.* “Generally, overcoming the presumption of validity in a district court requires clear and convincing evidence.” *Slyce Acquisition Inc. v. Syte - Visual Conception Ltd.*, No. W-19-CV-00257-ADA, 2020 WL 278481, at *4 (W.D. Tex. Jan. 10, 2020) (Albright, J.) (denying motion for reconsideration of denial of Section 101 motion to dismiss ,

² This limitation is included in all asserted claims.

³ Determining the lowest cost paths as part of the claimed method was a key limitation in the allowance of the ’144 patent claims. As the applicant explained, although the prior art used a modulo operation to assign paths for a network packet, the prior art did not suggest or teach that the operation should be performed to assign only the lowest cost paths. (Ex. 2 (March 16, 2015 Applicant Amendment and Remarks, U.S. Patent Application No. 13/631,169).) The search queries performed by the examiner show that the examiner considered this argument and ultimately determined that the claims of the ’144 patent were novel, non-obvious, and allowable over the prior art. (Ex. 3 (April 24, 2015 EAST Search History, U.S. Patent Application No. 13/631,169).)

noting that the “clear and convincing” standard is a “high bar” and that “resolving § 101 eligibility of all asserted claims almost certainly requires fact discovery”).

Patentable Subject Matter Under 35 U.S.C. § 101. Patent eligibility under § 101 is a question of law, based on underlying facts. *See Berkheimer v. HP Inc.*, 881 F.3d 1144, 1368 (Fed. Cir. 2018). Courts analyze whether a patent is directed to an “abstract idea” under 35 U.S.C. § 101 under a two-step process (*Alice* Step 1 and *Alice* Step 2). *Alice*, 134 S. Ct. at 2355. With respect to § 101 defenses, claims are presumed valid under 35 U.S.C. § 282(a), and a defendant can overcome that presumption only by proving by clear and convincing evidence that they fail both *Alice* steps. In *Alice* Step 1, the inquiry focuses on the characterization of the claims—i.e., what the claims, considered as a whole and in light of the specification, are “directed to.” *Enfish*, 822 F.3d at 1335.

In asking this threshold question, courts focus on the specific claimed solution, rather than high-level simplification, because “[a]t some level, ‘all inventions … embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Alice*, 134 S. Ct. at 2354 (emphasis added). Indeed, the Federal Circuit has cautioned against oversimplification when attempting to articulate the abstract idea. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (“[C]ourts ‘must be careful to avoid oversimplifying the claims’ by looking at them generally and failing to account for the specific requirements of the claims.’”) And a patent’s description of technological shortcomings in the prior art supports the conclusion that the claims are directed to a specific, patent-eligible invention, rather than to an abstract idea. *Id.*

Under *Alice* Step 2, claims directed to abstract ideas under *Alice* Step 1 are still valid if they recite “an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 134 S. Ct. at 2357. The focus of Step 2 of *Alice* is a search for “something more,” something that ensures the claims are “more than a drafting effort designed to

monopolize the abstract idea.” *Id.* at 2354–2357 (internal brackets omitted). For example, claims that specify *how* interactions between computers may be manipulated in a way that overrides routine, conventional computer activity recite an inventive concept. *See DDR Holdings, LLC v. Hotels.com, LP*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). The claims as a whole must be considered as an ordered combination rather than simply isolating elements or focusing on whether only certain elements recite a patentable invention. *See BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). “[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Id.* Additionally, an inventive concept may be evidence by specific benefits that the invention provides not present in the prior art. *See, e.g., Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1302 (Fed. Cir. 2016).

IV. ARGUMENT

A. ALICE STEP 1: The Asserted Claims Are Not Directed to an Abstract Idea.

1. The Patent Claims Provide Technical Solutions to Problems Associated with Prior Art Monitors for Schedulers.

The asserted claims of the ’144 patent are directed to a new and inventive network device or mechanism that determines and selects the lowest cost communication traffic path(s) through a LAN or similar communication network. *See, e.g., supra* at 4-5. These claims reflect a patent-eligible improvement to network functionality by allocating traffic, such as VLAN traffic, to the determined and indexed lowest cost paths within the network, which is not an abstract idea. *See, e.g., Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1305 (Fed. Cir. Jan. 10, 2018) (stating a method for virus scanning was directed to patent-eligible subject matter under *Alice* Step 1 because it “employs a new kind of file that enables a computer security system to do things it could not do before,” including “accumulat[ing] and utiliz[ing] newly available, behavior-based information

about potential threats”); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (“The patented system achieved greater accuracy than these prior art systems by measuring inertial changes of the tracked object relative to the moving platform’s reference frame.”); *Enfish*, 822 F.3d at 1336, 1339 (ruling that the “self-referential table recited in the claims . . . [was] a specific type of data structure designed to improve the way a computer stores and retrieves data in memory”).

In *SRI Int’l, Inc. v. Cisco Systems, Inc.*, the Federal Circuit held claims drawn to a method of hierarchical computer network monitoring to be patent-eligible. 930 F.3d 1295, 1301 (Fed. Cir. 2019). The *SRI* claims recited a series of steps, including “deploying” network monitors, which detect “suspicious network activity based on analysis of network traffic data,” and generating and integrating “reports of … suspicious activity.” *Id.* The Federal Circuit held that the claims were not directed to an abstract idea because they were “necessarily rooted in computer technology in order to solve a specific problem in the realm of computer networks.” *Id.* at 1303. The Federal Circuit recognized that the claims were not using a computer as a tool but, instead, recited a specific technique for improving computer network security. *Id.* In informing the court’s understanding of the technology and its relationship to the art, the court relied on statements in the specification that the claimed invention purported to solve weaknesses in the prior art by providing a framework for recognition of global threats to interdomain connectivity. *Id.* at 1303-04.

And in *Packet Intelligence LLC v. NetScout Systems, Inc.*, 965 F.3d 1299, 1309 (Fed. Cir. 2020), *cert. denied*, 141 S. Ct. 2521 (2021), the Federal Circuit considered an invention that monitored data flows through a network to determine which packets were associated with which “conversation flow,” and to thereby determine the amount or type of information being transmitted by a particular application or protocol. *Id.* at 1307. Packet Intelligence argued, and the Federal

Circuit agreed, that the claims were directed to a technical problem and provided a solution that could associate data with specific applications or protocols, functionality that was lacking in prior art systems. *Id.* at 1308. *See also Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1309 (Fed. Cir. 2020) (claims that recited “specific improvement in the functionality of the communication system itself, namely the reduction of latency experienced by parked secondary stations” were patent-eligible under *Alice* Step 1).

So, too, here. The ’144 patent claims are similar to the patent-eligible claims in *Finjan*, *SRI*, *Enfish*, and *Packet Intelligence*, because they teach a specific solution to the technical problems faced by prior art network path assignment methods. More specifically, the ’144 patent claims teach the use of the V mod N algorithm to assign network traffic only to paths that are determined to be and indexed as the lowest cost paths in the network. *See supra* at 6. This ensures that network resources are used efficiently and that paths are not inadvertently blocked, as could occur using prior art path assignment protocols. These are the very kinds of improvements that meet the requirements of *Alice* Step 1. *Enfish*, 822 F.3d at 1337 (“[O]ur conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification’s teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements.”).

This improvement is analogous to those methods or new data structures that were previously found to be non-abstract in *Finjan*, *SRI*, *Enfish*, *Packet Intelligence*, and *Uniloc*, among others. Indeed, just as in *SRI*, the invention of the ’144 patent improves network functionality: it allows a communication network to direct traffic specifically to the lowest cost paths in the network and to ensure that traffic is allocated among all the lowest cost paths that it identifies, as opposed to having certain paths blocked by the path assignment protocol or using paths that are

higher cost. *SRI Intl.*, 930 F.3d at 1303 (“The claims are directed to using a specific technique . . . to solve a technological problem arising in computer networks: identifying hackers or potential intruders into the network.”). *See supra* at 3-4.

2. Dell’s Characterizations of the ’144 Patent Should Be Rejected.

The Court should reject Dell’s characterization of the ’144 patent claims as directed to an abstract idea. Dell contends that the asserted claims are directed to the abstract idea of “round robin distribution,” referencing dealing cards as a drastically oversimplified analogy. Mot. at 7-8. Dell essentially takes the position that the mere use of a mathematical equation—here, the modulus operation—requires that the claims of the ’144 patent be found patent-ineligible. But Dell’s position is not supported by case law. As the Federal Circuit recently stated, “The mere fact that [a] claim employs a mathematical formula does not demonstrate that it is patent ineligible.” *California Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 988 (Fed. Cir. 2022). And in that case, the court ultimately held that the claim was patent-eligible, because it was directed to an “efficient, improved method,” just as the claims are here. *Id.*

Additionally, Dell’s proposed abstract idea is an oversimplification of the claims’ use of the modulus operation and does not account for the arrangement of limitations that resulted in the ’144 patent being issued. *See supra* at 8 n.3; see, e.g., *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020) (“And we have reiterated the Supreme Court’s caution against ‘overgeneralizing claims’ in the § 101 analysis, explaining that characterizing the claims at ‘a high level of abstraction’ that is ‘untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule.’”)(citations omitted); *Shopify Inc. v. Express Mobile, Inc.*, No. CV 19-439-RGA, 2021 WL 4288113, at *22 (D. Del. Sept. 21, 2021) (same). This oversimplification should be rejected just as a similar oversimplification was rejected in *Packet*

*Intelligence.*⁴ 965 F.3d at 1308 (district court rejected argument that claim was directed to “collection, comparison, and classification of information”). Among other flaws, Dell’s purported characterization ignores that the limitations of claim 1 do not even require that V be assigned sequentially, contrary to its “card-dealing” analogy. Claiming the use of the “V mod N” algorithm does not necessarily mean that strict round robin distribution is required. Indeed, the ’144 patent’s claims do not recite “round robin,” nor does the specification explicitly mention it. Dell’s characterizations and analogy are inapt and misleading. Dell also ignores that the number of paths available and the specific assignment of VLANs to paths may change – yet another difference from a simple round-robin assignment scheme. (Ex. 1 at 4:32-35 (stating that networks are not static and may change configurations); 5:10-12 (noting possible changes in network topology); 7:48-51 (noting that path selection process may occur for several VLANs at the same time and traffic may be forwarded before all VLANs have completed path selection).)

Further, in making this argument, Dell improperly downplays the novelty of the claimed invention by comparing it to the human mind. Mot. at 14. But as in *SRI*, the claims of the ’144 patent are not directed to an abstract idea that the human mind can perform – they are specifically directed to selecting a path through a network by, among other things, determining lowest cost paths and assigning traffic to those paths. *SRI Int’l*, 930 F.3d at 1304 (“Indeed, we tend to agree with SRI that the human mind is not equipped to detect suspicious activity by using network

⁴ The main case upon which Dell primarily relies in making its *Alice* Step 1 argument is readily distinguishable. In *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, the claims failed to concretely capture any specific technological improvement. Instead, they simply recited methods for transmitting packets over a network. 874 F.3d 1329, 1334-35 (Fed. Cir. 2017). But here, the thrust of the claims are directed toward improving the efficiency of network path assignments by assigning traffic to determined and indexed lowest cost paths, with the use of a mathematical algorithm comprising one limitation of the claims.

monitors and analyzing network packets as [claimed].”). Nowhere in its brief does Dell explain how the human mind can perform all the steps of the asserted claims, as opposed to only the isolated modulus operation.

B. ALICE STEP 2: The ’144 Patent Claims Have an Inventive Concept That Transforms Them Into a Patentable Invention.

Even if, *arguendo*, the asserted claims of the ’144 patent were directed to an abstract idea, they would still be patent-eligible. Under *Alice* Step 2, a claim that fails Step 1 may nevertheless be patent-eligible if it contains unconventional steps that “transform” the invention “into a patent eligible application.” *BASCOM*, 827 F.3d at 1347; *CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091 (Fed. Cir. 2021). “[A] claim directed to an ineligible concept may become patent-eligible when it includes unconventional steps that ‘confine[] the claims to a particular application of the principle.’” *T-Rex Prop. AB v. Regal Entm’t Grp.*, No. 6:16-cv-927-RWS-KNM, 2017 WL 4229372, at *10 (E.D. Tex. Aug. 31, 2017) (citations omitted); *see also BASCOM*, 827 F.3d at 1348 (“some inventions’ basic thrust might more easily be understood as directed to an abstract idea, but under step two of the *Alice* analysis, it might become clear that the specific improvements in the recited computer technology go beyond ‘well-understood, routine, conventional activit[ies]’ and render the invention patent-eligible.”).

For example, the patent in *CosmoKey* disclosed a method for authenticating the identity of a user performing a transaction at a computer, including activating the authentication function on the user’s mobile phone. *Id.* at 1093. The Federal Circuit found that the patent specification recognized that “when a user communicates with a remote transaction partner (e.g., a bank, a store, or a secure database) via a communication channel like the Internet, ‘it is important to assure that an individual that identifies itself as an authorized user is actually the person it alleges to be.’” *Id.* The Federal Circuit found that the focus of the claimed invention is the “activation of the

authentication function, communication of the activation within a predetermined time, and automatic deactivation of the authentication function.” *Id.* at 1097. The Federal Circuit concluded that the patent specification describes the particular authentication technique as a technical improvement over the conventional prior-art authentication methods that prevents unauthorized access by third parties, and therefore is an inventive concept. *Id.* at 1099. The court also held that “claims and specification recite a specific improvement to authentication that increases security, prevents unauthorized access by a third party, is easily implemented, and can advantageously be carried out with mobile devices of low complexity.” *Id.* at 1098.

So too, the ’144 patent claims cover a specific network component and mechanism for determining, selecting, and assigning lowest cost paths over a network to communication traffic. It is only this mechanism that is claimed – not all uses and applications of the overly simplified concept suggested by Dell (the “round robin” modulus operation). The specification instead makes clear that the patent is focused on a specific application of the concept of routing traffic over a communication network and that this specific application provides clear benefits over the prior art because it uses available lowest cost paths in the network in a manner not previously used. (Ex. 1 at 4:44-49; 9:12-13.) *See McRO, Inc.*, 837 F.3d at 1316 (“By incorporating the specific features of the rules as claim limitations, claim 1 is limited to a specific process for automatically animating characters using particular information and techniques and does not preempt approaches that use rules of a different structure or different techniques.”). And, as in *CosmoKey*, the method claimed in the ’144 patent improves the actual functionality of the network by ensuring that all possible paths through the network are available for use.

Dell contends that the '144 patent claims do not teach an inventive concept because they recite only "well known" components and techniques.⁵ Mot. at 10-11. However, the fact that claims recite some generic components or functions does not render the claims patent-ineligible. *See Enfish*, 822 F.3d at 1336 (finding software-based claims containing "data storage," "memory," and "data" valid under *Alice*); *see also Amdocs*, 841 F.3d at 1300 (explaining that a "solution [that] requires arguably generic components" is still patent-eligible when "these generic components operate in a nonconventional manner to achieve an improvement in computer functionality" that is "a critical advancement over the prior art"); *BASCOM*, 827 F.3d at 1350 ("The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.").

Indeed, Dell's repeated assertion that the claims merely recite the use of generic, "well-known" components is an oversimplification of the claims that courts have regularly warned against.⁶ *See, e.g., Verint Sys. Inc. v. Red Box Recorders Ltd.*, 226 F. Supp. 3d. 190, 192-93 (S.D.N.Y. 2016) ("Many recent motions seeking determinations of patent ineligibility suffer from such reductionist simplicity – from characterizing as simply a mousetrap that which is in fact a better mousetrap."). Dell's analysis is insufficient and fails to account for novel arrangements of limitations, including the limitation that requires determination of the lowest cost network paths. *See supra* at 4, 8. Thus, the '144 patent claims teach an inventive concept more than sufficient to pass *Alice* Step 2.

⁵ In an attempt to support this misreading of the '144 patent, Dell entirely ignores statements in the specification that explain how the claimed invention is an improvement over the prior art.

⁶ Dell asserts the claims recite concepts that were "well-known," but its primary basis for this assertion appears to be simply that the patent provides abbreviations for terms used in describing the art at the time of the invention. Mot. at 2 n.1. Dell also ignores the plain statement in the patent that "no admission is made . . . that these techniques and schemes were heretofore commercialized or known to others besides the inventors." (Ex. 1 at 2:13-17.)

C. There Are Questions of Fact That Preclude Judgment on the Pleadings

Thus, at minimum, factual disputes remain concerning whether the '144 patent claims recite “conventional” and “well-known” components or functions and teach technological advancements over the prior art. In light of the presumption of validity and the “clear and convincing” standard applied to Section 101 challenges, *see Microsoft Corp. v. i4i LP*, 131 S.Ct. 2238, 2242 (2011), these disputes preclude dismissal prior to completion of discovery. *See also Slyce*, 2020 WL 278481, at *7 (noting difficulty in resolving Section 101 motions because of “the obstacles of overcoming the presumption of validity with clear and convincing evidence” and “the lack of fact discovery” at the Rule 12(b) motion stage). Accordingly, Dell’s Motion is premature and should be denied.

V. CONCLUSION

Brazos respectfully requests that this Court deny Dell’s Motion, or, alternatively, defer its ruling until after discovery.

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RESPECTFULLY SUBMITTED,

By: /s/ Jonathan K. Waldrop

Jonathan K. Waldrop (CA Bar No. 297903)

(Admitted in this District)

jwaldrop@kasowitz.com

Darcy L. Jones (CA Bar No. 309474)

(Admitted in this District)

djones@kasowitz.com

Marcus A. Barber (CA Bar No. 307361)

(Admitted in this District)

mbarber@kasowitz.com

Heather S. Kim (CA Bar No. 277686)

(Admitted in this District)

hkim@kasowitz.com

John W. Downing (CA Bar No. 252850)

(Admitted in this District)

jdowning@kasowitz.com

ThucMinh Nguyen (CA Bar No. 304382)

(Admitted in this District)

tnguyen@kasowitz.com

Chen Jia (CA Bar No. 281470)

(Admitted *pro hac vice*)

cjia@kasowitz.com

KASOWITZ BENSON TORRES LLP

333 Twin Dolphin Drive, Suite 200

Redwood Shores, California 94065

Telephone: (650) 453-5170

Facsimile: (650) 453-5171

Paul G. Williams (GA Bar No. 764925)

(Admitted in this District)

pwilliams@kasowitz.com

KASOWITZ BENSON TORRES LLP

1230 Peachtree Street N.E., Suite 2445

Atlanta, Georgia 30309

Telephone: (404) 260-6080

Facsimile: (404) 260-6081

Joshua A. Whitehill (NY Bar No. 4766473)

(Admitted *pro hac vice*)

jwhitehill@kasowitz.com

Hershy Stern (NY Bar No. 4631024)

(Admitted *pro hac vice*)

hstern@kasowitz.com

Julianne Laporte (NY Bar No. 5547906)

(Admitted *pro hac vice*)

jlaporte@kasowitz.com

Howard L. Bressler (NY Bar No. 2487379)
(Admitted *pro hac vice*)
hbressler@kasowitz.com
Shelley Ivan (NY Bar No. 4338067)
(Admitted *pro hac vice*)
sivan@kasowitz.com
Noah P. Dorman (DC Bar No. 1779821)
(Admitted *pro hac vice*)
ndorman@kasowitz.com
KASOWITZ BENSON TORRES LLP
1633 Broadway
New York, NY 10019
Telephone: (212) 506-1700
Facsimile: (212) 506-1800

Mark D. Siegmund (TX Bar No. 24117055)
mark@swclaw.com
Craig D. Cherry (TX Bar No. 24012419)
craig@swclaw.com
Justin Allen (TX Bar No. 24081977)
justin@swclaw.com
STECKLER WAYNE CHERRY & LOVE PLLC
8416 Old McGregor Road
Waco, TX 76712
Telephone: (254) 651-3690
Facsimile: (254) 651-3689

Gregory Phillip Love (TX Bar No. 24013060)
greg@swclaw.com
STECKLER WAYNE CHERRY & LOVE PLLC
107 East Main Street
Henderson, TX 75652
Telephone: (903) 212-4444
Facsimile: (903) 392-2267

Attorneys for Plaintiff
WSOU INVESTMENTS, LLC d/b/a
BRAZOS LICENSING AND
DEVELOPMENT

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically to all counsel of record, on this 23rd day of May, 2022, via the Court's CM/ECF system.

/s/ Jonathan K. Waldrop
Jonathan K. Waldrop